

BERNARD ET AL. -- 10/783,716  
Client/Matter: 042860-0308305

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of data transfer, the method comprising:  
transmitting, to an optical network unit (ONU), an indication of a time relative to a current system time;  
maintaining at the ONU, one or more counters synchronized to the current system time;  
receiving network data collected at the ONU in accordance with the transmitted indication; and  
storing the received network data.
2. (Original) The method of claim 1, further comprising:  
receiving, from a management system, a request for network data; and  
transmitting, to the management system in accordance with the request, at least a portion of the stored network data.
3. (Original) The method of claim 2, wherein the request for network data pertains to a plurality of ONUs.
4. (Original) The method of claim 1, further comprising:  
receiving a request to reset network data associated with the ONU; and  
deleting at least a portion of the stored network data.
5. (Original) The method of claim 1, wherein the stored network data includes a plurality of bins.
6. (Original) The method of claim 1, wherein the network data is collected and received at 15-minute intervals.

BERNARD ET AL. -- 10/783,716  
Client/Matter: 042860-0308305

7. (Original) The method of claim 1, wherein the stored network data includes at least one daily counter.

8. (Currently Amended) ~~The method of claim 1, further~~ A method of data transfer, the method comprising:

transmitting, to an ONU, an indication of a time relative to a current system time;  
receiving network data collected at the ONU in accordance with the transmitted indication;

storing the received network data;  
receiving a new system time; and  
resetting at least a portion of the stored network data if a difference between the new system time and a current system time exceeds a predetermined value.

9. (Original) The method of claim 8, wherein the resetting includes deleting at least a portion of the stored network data.

10. (Original) The method of claim 1, further comprising maintaining a flag indicative of a validity of the received network data.

11. (Original) The method of claim 1, wherein the ONU comprises an optical network termination (ONT).

12. (Original) The method of claim 1, wherein the network data comprises performance data monitored at the ONU.

13. (Original) The method of claim 1, wherein the received network data is stored locally.

14. (Currently Amended) A method of data transfer, the method comprising:  
receiving, from an optical line termination (OLT), an indication of a time relative to a current system time;

BERNARD ET AL. -- 10/783,716  
Client/Matter: 042860-0308305

collecting network data in accordance with the received indication; and  
transmitting the collected network data to the [[OLT.]] OLT, wherein portions of the  
collected network data are identified with time intervals synchronized by the received indication.

15. (Original) The method of claim 14, wherein the network data are collected in at least one 15-minute bin.

16. (Original) The method of claim 14, further comprising receiving, from the OLT, a request for network data.

17. (Original) The method of claim 14, further comprising:  
receiving, from the OLT, a request to reset network data; and  
deleting the collected network data.

18. (Original) The method of claim 14, further comprising maintaining a flag indicative of a validity of the collected network data.

19. (Currently Amended) An optical line termination (OLT) configured to operate in a passive optical network, the OLT comprising:  
a transmitter configured to transmit, to an optical network unit (ONU), an indication of a time relative to a current system time;  
a receiver configured to receive network data collected at the ONU in accordance with the transmitted indication; and  
a storage device configured to store the received network [[data.]] data, wherein  
portions of the received network data are identified with time intervals associated with  
the transmitted indication.

20. (Original) The OLT of claim 19, wherein:  
the receiver is further configured to receive, from a management system, a request for network data, and

BERNARD ET AL. -- 10/783,716  
Client/Matter: 042860-0308305

the transmitter is further configured to transmit, to the management system in accordance with the request, at least a portion of the stored network data.

21. (Original) The OLT of claim 20, wherein the network data comprises performance data monitored at the ONU.

22. (Original) The OLT of claim 19, wherein the stored network data includes at least one daily counter.

23. (Currently Amended) An optical network unit (ONU) configured to operate in a passive optical network, the ONU comprising:

a receiver configured to receive, from an optical line termination (OLT), an indication of a time relative to a current system time;

one or more counters synchronized to the current system time;

a data collector configured to collect network data in accordance with the received indication; and

a transmitter configured to transmit the collected network data to the OLT.

24. (Original) The ONU of claim 23, wherein the ONU is configured to maintain a flag indicative of a validity of the collected network data.

25. (Currently Amended) A data storage medium having instructions executable by an array of logic elements, said instructions describing a method of data transfer, the method comprising:

transmitting, to an optical network unit (ONU), an indication of a time relative to a current system time;

receiving network data collected at the ONU in accordance with the transmitted indication; and

storing the received network [[data.]] data, wherein

portions of the received network data are identified with time intervals associated with the transmitted indication.

BERNARD ET AL. - 10/783,716  
Client/Matter: 042860-0308305

26. (Original) The medium of claim 25, the method further comprising:  
receiving, from a management system, a request for network data; and  
transmitting, to the management system in accordance with the request, at least a portion  
of the stored network data.

27. (Currently Amended) A data storage medium having instructions executable by  
an array of logic elements, said instructions describing a method of data transfer, the method  
comprising:

receiving, from an optical line termination (OLT), an indication of a time relative to a  
current system time;  
collecting network data in accordance with the received indication; and  
transmitting the collected network data to the [[OLT.]] OLT, wherein  
portions of the collected network data are identified with time intervals synchronized  
with the transmitted indication.

28. (Original) The medium of claim 27, the method further comprising maintaining a  
flag indicative of a validity of the collected network data.